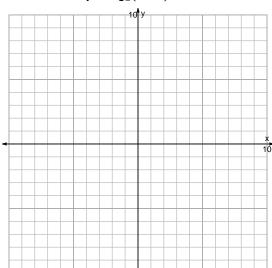
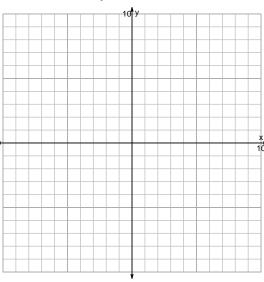
s18quiz: EXP LOG (Example v2)

1. Graph $y = \log_2(x+6) - 3$ and $y = 2^{x-3} + 5$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x+6) - 3$$



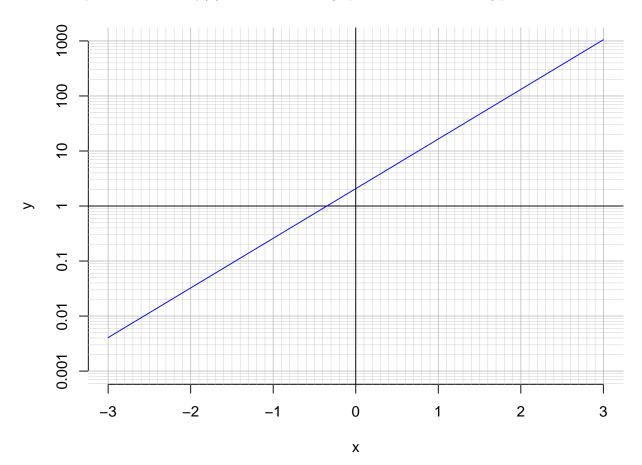
$$y = 2^{x-3} + 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$13 = \left(\frac{4}{5}\right) \cdot 2^{3t/7}$$

3. An exponential function $f(x) = 2.07 \cdot e^{2.08x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(-0.4).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(0.005)$.